

Title (en)
COLOR-SORTING MACHINE

Title (de)
FARBSORTIERMASCHINE

Title (fr)
MACHINE DE TRI DE COULEURS

Publication
EP 3693091 A4 20210908 (EN)

Application
EP 18864933 A 20180925

Priority
• JP 2017192894 A 20171002
• JP 2018035347 W 20180925

Abstract (en)
[origin: EP3693091A1] Provided is a color sorting machine capable of properly removing foreign matter even when the specific gravity of the object to be sorted is low. A color sorting machine M1 removes foreign matter F in the object to be sorted being conveyed from a conveyance route G into a removal route R. The color sorting machine M1 is equipped with a supply portion 1 supplying the object to be sorted to the conveyance route G, a sorting portion 2 surrounding a sorting region R and partially formed by transparent walls 21a and 21b, a first conveying portion 3 surrounding the periphery of the conveyance route G to the sorting region R, a second conveying portion 4 hermetically surrounding the periphery of the conveyance route G from the sorting region R, a removing portion 5 hermetically surrounding the periphery of the removal route D extending from the sorting region R, an air intake port 32, a detection device 6 optically detecting the foreign matter F in the object to be sorted, a removal device 7 having an ejection port 72 hermetically inserted into the sorting portion 2, and a first suction device 8 provided in the second conveying portion 4 and sucking in the air in the conveyance route G to thereby generating an airflow heading for the second conveying portion 4 from the air intake port 32.

IPC 8 full level
B07C 5/342 (2006.01); **B07C 5/36** (2006.01)

CPC (source: EP US)
B07C 5/342 (2013.01 - EP); **B07C 5/3422** (2013.01 - US); **B07C 5/361** (2013.01 - US); **B07C 5/363** (2013.01 - EP US)

Citation (search report)
• [A] WO 9635831 A1 19961114 - JOSSI HANS PRAEZISIONSMECHANIK [CH], et al
• See references of WO 2019069742A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
EP 3693091 A1 20200812; **EP 3693091 A4 20210908**; **EP 3693091 B1 20230705**; **EP 3693091 C0 20230705**; CN 110582357 A 20191217; CN 110582357 B 20211008; ES 2950127 T3 20231005; JP 2019063746 A 20190425; JP 6275911 B1 20180207; US 11033937 B2 20210615; US 2020222944 A1 20200716; WO 2019069742 A1 20190411

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